

## Abstract

A method for producing a dendrimer having a structural repeating unit which is represented by formula (1) and which contains a linear portion including a thiylene moiety and a branch portion Y formed of an optionally substituted trivalent organic group. The method is based on the convergent method and includes reaction step 1 of converting  $\alpha$ -position hydrogen of the thiophene ring of a thiylene-moiety-containing compound (a) for forming end moieties to an active group V<sub>1</sub> which undergoes Suzuki cross-coupling reaction, to thereby form compound (b); reaction step 2 of subjecting a compound (c) to Suzuki cross-coupling reaction with the compound (b), to thereby yield compound (d), the compound (c) having a linear portion and a branch portion Y and having, at the branch portion Y, two active groups V<sub>2</sub> which undergo Suzuki cross-coupling reaction with the active group V<sub>1</sub>; reaction step 3 of converting  $\alpha$ -position hydrogen of the thiophene ring of the thus-formed compound to an active group V<sub>1</sub> which undergoes Suzuki cross-coupling reaction, and reacting the compound (c) with the active group V<sub>1</sub>, to thereby form a dendron of a subsequent generation; and a step of repeating the reaction step 3 in accordance with needs, to thereby form a dendrimer.

